

COMMENTS ON PROPOSED RULE 5.700 – WIND SOUND

May 11, 2017

By Electronic Mail:

Judith C. Whitney, Clerk of the Board Vermont Public Service Board 112 State Street Montpelier, VT 05620

Re: Comments on Proposed Rule 5.700 – Wind Sound

The following are comments from Aegis Renewable Energy, Inc. in regard to the proposed Public Service Board ("Board") Rule 5.700 – Rule on Sound from Wind Generation Facilities ("Rule"). We appreciate the Board's consideration of our comments.

Summary of comments:

- The proposed Rule unreasonably singles out the wind industry in Vermont. It would be extremely difficult for any infrastructure in Vermont (i.e. transmission substations, roads, saw mills, etc.) to operate below the proposed 35-decibel limit;
- If the proposed Rule is implemented, Vermont will have the most restrictive wind turbine sound rule in the United States and Canada; effectively "banning" future wind development in Vermont.
- A diverse source of renewable energy is required in order to meet the renewable energy and greenhouse gas reduction goals outlined in Vermont's Comprehensive Energy Plan 2016;
- The proposed Rule is not based on adequate scientific or polling data.

Respectfully Submitted,

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The proposed Rule unreasonably singles out the wind industry in Vermont.

The proposed Rule ostracizes the wind industry by requiring wind turbines to operate at much lower sound levels than the majority of existing infrastructure in Vermont. For example, gravel pits/quarries, roads, railways, dams, transmission substations, farms, saw mills/firewood processing plants, landfills, marinas, airports, manufacturing plants, and automobile mechanic shops operate at sound levels louder than 45-decibals. It is unreasonable to treat wind turbines differently than the above-listed infrastructure.

If implemented, the proposed Rule will be the most restrictive wind turbine sound rule in the United States & Canada; effectively "banning" future wind development in Vermont.

The proposed Rule establishes a sound limit 10 decibels less than the current sound limit. Since decibels are measured on a logarithmic scale, the proposed 35 decibel limit is *twice* as quiet as the current 45 decibel limit. It is impossible for wind turbines to comply with this sound limit. As a result, all future wind development in Vermont will come to a halt.

It will be difficult, if not impossible, to meet the renewable energy and greenhouse reduction goals outlined in Vermont's *Comprehensive Energy Plan 2016* without a diverse source of renewable energy such as wind.

Wind energy plays a key part of Vermont's *Comprehensive Energy Plan 2016* ("CEP"). Without wind energy, it will be extremely difficult, if not impossible, to meet Vermont's aggressive renewable energy and greenhouse reduction goals. The CEP states that "Development of local renewable technologies such as biomass, wind, solar, and hydro will contribute to meeting the goals set by the Legislature and in the CEP, and will be responsive to the wishes of Vermonters as expressed during the broad public engagement processes held for revising the CEP" and that "wind power should continue to be an important renewable resource for Vermont's diverse electricity portfolio going forward."

The proposed Rule is not based on adequate scientific or polling data.

The proposed Rule should not be implemented until it can be demonstrated with adequate scientific data that wind turbines are harmful to public health. The CEP admits that "wind turbine

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¹ Vermont Department of Public Service, Comprehensive Energy Plan 2016, p. 243.

² *Id.* at 322.



noise was not found to be related to measures of sleep quality or physiological indicators of stress, such as hair cortisol concentrations, blood pressure, or resting heart rate" and that "there is a larger body of literature available on the public health implications of annoyance from other sources of community noise, including roads, airports, and industry."

Before the proposed Rule is implemented, the Board should conduct a cost-benefit analysis, weighing the pros and cons of adopting this Rule. Wind energy is good for both the environment and the economy. For example, the CEP notes that "among all forms of new renewable energy electric generation, wind generation is the least expensive to build in Vermont today. A 2013 study in the Journal of Environmental Studies and Sciences found that when climate change and health impacts are factored in, electricity generated from wind (and solar) is less expensive than from coal and a 2015 analysis by the U.S. DOE concluded that wind power will be cheaper than power produced from natural gas within the decade, even without subsidies." Wind energy is also good for the environment. For example, the CEP notes that "all wind projects now installed in Vermont reduce approximately 275 million pounds of CO2 emissions from the New England grid each year." The Board should follow the conclusions of the Department of Public Service.

³ Id. at 317.

⁴ Id. at 314.

⁵ *Id.*